

INORGANIC CHEMICAL ANALYSES OF GROUND-WATER SAMPLES

Table 1. Inorganic Chemical Analyses - Shallow Overburden Wells
(sample locations shown on Map 3126-1)

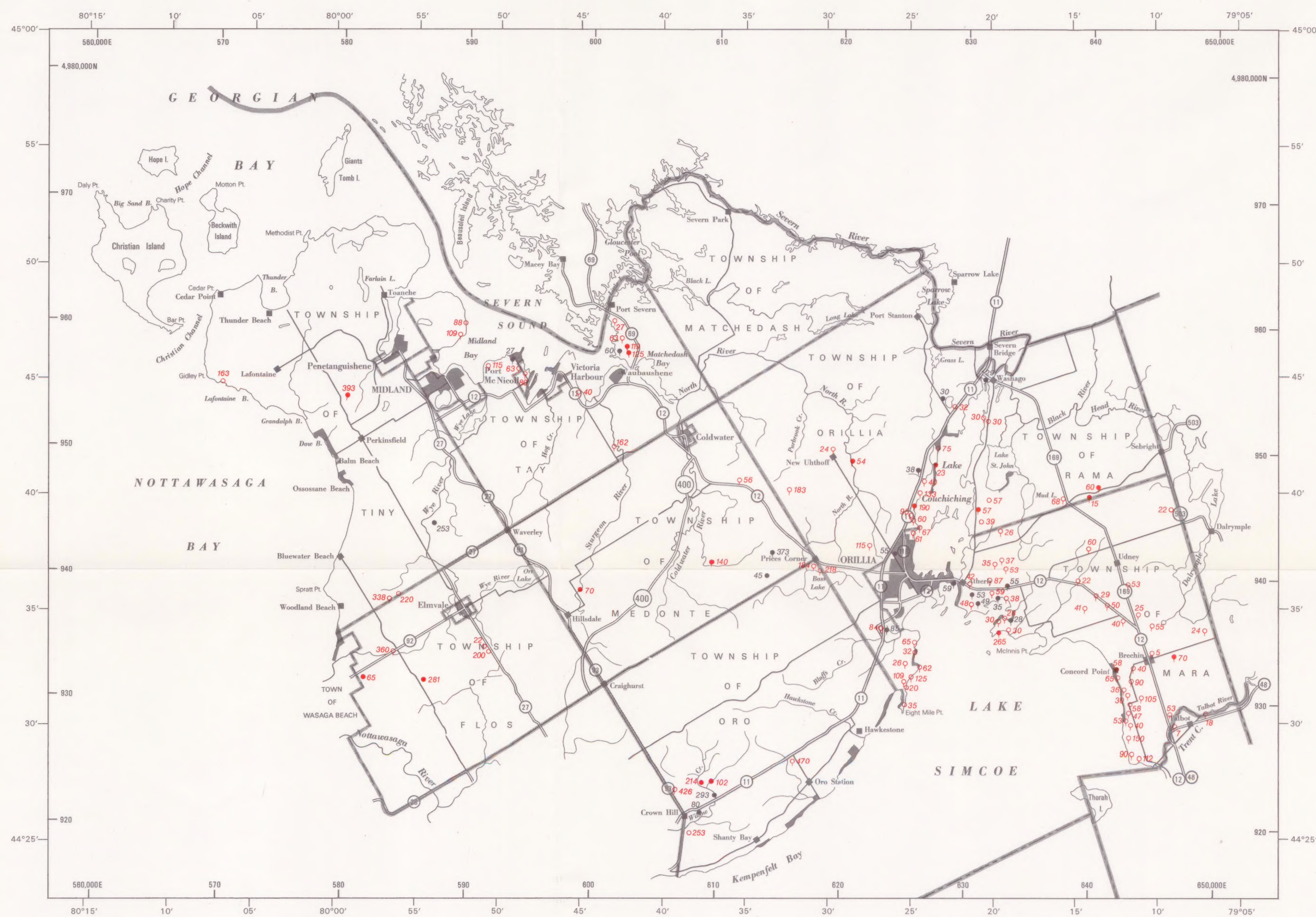
Sample Number	Sampling Date	pH	Constituents in milligrams per litre (mg/L)													Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Total Solids (mg/L)	Specific Conductance (µmhos at 25°C)
			Total Iron (µM)	Calcium (µM)	Magnesium (µM)	Sodium (µM)	Potassium (µM)	Barium (µM)	Sulphate (µM)	Chloride (µM)	Fluoride (µM)	NO ₃ -N (µM)	NO ₂ -N (µM)	NO ₃ -N (µM)					
8025	24/06/80	7.6	0.31	90	17	4	1.7	248	18	7	0.1	5.3	248	297	360	535			
57202	23/06/80	7.7	0.6	75	5	4	5.9	183	23	2	<0.1	1.8	183	208	255	384			
57203	23/06/80	7.4	39	100	17	5	4.3	192	36	84	<0.1	58	192	369	590	720			
57208	23/06/80	7.6	89	85	3	2	1.4	77	19	2	<0.1	22	77	170	235	365			
57209	23/06/80	7.4	24	133	12	19	7.6	291	41	28	0.1	13	291	382	545	782			
57213	23/06/80	7.5	27	75	2	2	0.8	187	16	7	<0.1	<0.1	187	195	230	356			
57215	23/06/80	7.5	48	54	6	2	6.8	142	15	2	<0.1	0.7	142	157	200	304			
57217	23/06/80	7.3	05	146	23	13	3.3	380	32	38	<0.1	1.5	380	458	560	840			
57218	23/06/80	7.1	15	141	15	11	0.2	362	55	24	<0.1	36	362	412	800	1140			
57220	23/06/80	7.5	13	120	5	5	1.5	292	19	7	<0.1	0.4	292	321	375	525			
57225	24/06/80	7.4	03	128	6	7	4.1	287	31	8	<0.1	4.8	287	343	450	622			
57226	24/06/80	7.6	03	87	9	5	1.2	193	16	19	<0.1	14	193	253	450	485			
57229	24/06/80	7.3	05	103	11	3	3.7	386	15	2	<0.1	1.0	386	545	590	800			
57235	26/06/80	7.7	<0.1	18	18	13	1.9	275	45	35	0.1	2.3	275	307	450	683			
57237	26/06/80	7.3	50	35	1	23	2.4	83	19	15	<0.1	4.1	83	92	180	275			
57400	26/06/80	6.7	36	24	5	6	5.1	14	21	10	<0.1	13	14	79	145	221			
57411	26/06/80	7.1	02	128	40	6	1.3	356	22	61	<0.1	1.6	356	478	600	818			
57421	26/06/80	6.8	26	19	2	2	2.7	26	12	14	<0.1	1.3	26	57	80	150			
57433	26/06/80	6.4	04	32	4	6	7.0	37	19	6	<0.1	15	37	90	165	256			
57435	26/06/80	7.2	01	115	10	3	2.9	256	13	3	<0.1	4.3	256	332	390	580			
57446	26/06/80	7.5	35	103	14	9	2.4	276	26	83	0.3	0.3	276	394	570	578			
57472	26/06/80	7.3	50	35	1	23	2.4	83	19	15	<0.1	4.1	83	92	180	275			
57477	26/06/80	7.3	79	87	10	11	3.1	255	22	27	0.2	0.2	255	297	355	530			
57485	26/06/80	8.1	33	29	1	3	2.4	59	10	3	<0.1	2.8	59	76	119	186			
57489	26/06/80	7.5	04	88	6	8	2.7	144	20	62	<0.1	1.8	144	246	450	515			
57510	26/06/80	7.7	03	76	22	9	2.4	237	37	17	<0.1	2.8	237	280	375	532			

Table 2. Inorganic Chemical Analyses - Deep Overburden Wells
(sample locations shown on Map 3126-3)

Sample Number	Sampling Date	pH	La	Constituents in milligrams per litre (mg/L)													Total Alkalinity (mg/L as CaCO ₃)	Total Hardness (mg/L as CaCO ₃)	Total Dissolved Solids (mg/L)	Specific Conductance (µS/cm at 25°C)
				Total Iron (µM)	Calcium (µM)	Magnesium (µM)	Sodium (µM)	Potassium (µM)	Barium (µM)	Sulphate (µM)	Chloride (µM)	Fluoride (µM)	NO ₃ -N (µM)	NO ₂ -N (µM)	NO ₃ -N (µM)					
443	27/07/59	8.0	—	0.28	—	—	—	—	—	—	—	—	—	—	159	101	—	—		
805	23/06/80	7.6	0.24	—	71	6	4	10	188	15	<1	0.1	<0.1	188	201	235	363			
1075	24/06/80	8.0	0.13	—	49	9	3	1.7	147	11	<1	<0.1	0.2	147	159	190	291			
1892	26/03/84	8.0	0.13	—	—	—	—	—	19	13	—	—	—	19	104	250	300			
3448	18/05/86	—	—	—	—	65	17	—	—	268	20	10	0.1	0.15	556	962	—			
3880	18/07/83	7.9	0.2	—	—	—	—	—	—	28	8	—	2.0	178	190	—	—			
3978	23/06/80	7.7	0.16	76	14	4	2.3	227	17	<1	0.1	10	227	246	285	436				
4476	18/07/83	7.9	0.25	—	—	—	—	—	—	16	5	—	—	174	166	—	—			
4479	18/07/83	7.5	0.12	—	—	—	—	—	—	24	9	—	1.5	242	248	—	—			
4502	18/07/83	8.2	0.15	—	—	—	—	—	—	10	2	0.19	128	122	—	—	—			
4505	30/06/84	8.1	—	—	—	—	—	—	—	10	2	0.1	0.15	156	162	—	—			
6384	23/06/80	7.8	0.02	65	17	4	2.0	193	16	2	0.1	5.7	193	231	275	420				
6705	23/06/80	7.9	0.34	46	15	7	1.7	177	10	<1	0.1	<0.1	177	177	235	359				
6763	23/06/80	7.7	0.10	81	12	3	2.6	177	25	1	0.1	0.3	177	203	235	364				
6765	23/06/80	7.8	0.33	141	22	25	4.3	332	60	39	0.1	11	332	444	700	868				
6767	23/06/80	8.1	0.16	43	4	2	1.2	107	12	<1	<0.1	0.3	107	150	150	228				
6770	23/06/80	7.8	0.13	59	15	5	2.3	157	30	10	0.1	4.0	157	211	285	405				
6771	23/06/80	7.9	0.07	50	7	3	2.5	118	22	4	<0.1	4.1	118	156	200	308				
6772	23/06/80	8.0	0.10	40	7	2	1.5	114	15	<1	<0.1	0.1	114	128	160	244				
6774	23/06/80	8.1	0.10	39	4	1	0.8	99	11	<1	<0.1	0.3	99	112	135	201				
6776	23/06/80	8.2	0.03	38	3	4	1.6	78	14	2	0.1	5.4	78	110	150	227				
67722	24/06/80	7.7	0.07	76	4	2	1.3	185	13	<1	<0.1	1.3	185	207	240	366				
67727	24/06/80	7.8	0.21	54	17	10	1.8	181	23	12	0.1	<0.1	181	207	255	405				
67728	24/06/80	7.8	0.02	78	8	1	0.8	201	13	2	<0.1	1.4	201	226	255	366				
6780	24/06/80	7.8	0.16	61	14	3	1.1	174	19	2	0.1	3.5	174	209	245	378				
67760	24/06/80	7.6	0.07	30	6	7	1.6	255	15	10	<0.1	1.4	255	286	370	545				
67652	27/06/80	7.6	0.17	<1	<1	85	1.9	300	31	14	<0.1	12	300	3	450	725				

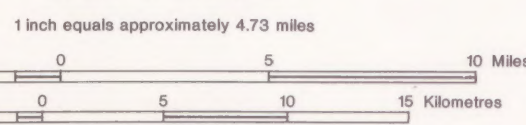
Table 3. Inorganic Chemical Analyses - Bedrock Wells
(sample locations shown on Map 3126-5)

Sample Number	Sampling Date	pH	Constituents in milligrams per litre (mg/L)													Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Total Solids (mg/L)	Specific Conductance (µmhos at 25°C)
			Total Iron (µM)	Calcium (µM)	Magnesium (µM)	Sodium (µM)	Potassium (µM)	Barium (µM)	Sulphate (µM)	Chloride (µM)	Fluoride (µM)	NO ₃ -N (µM)	NO ₂ -N (µM)	NO ₃ -N (µM)					
2774	01/71	7.4	0.15	—	—	—	—	—	—	—	—	—	—	—	12	248	304	390	
2818	01/71	7.2	0.19	—	—	—	—	—	—	—	—	—	—	—	4.0	270	440	820	
3598	18/07/83	7.9	0.18	—	—	—	—	—	—	—	—	—	—	—	0.3	236	500	—	
3586	26/06/80	8.0	0.12	369	29	1000	8.8	51	1650	147	1.7	<0.1	31	1940	4330	5550	—		
13843	27/06/80	7.4	3.0	116	17	6	2.0	278	63	10	<0.1	<0.1	278	358	440	620	—		
5722	26/06/80	7.5	0.24	181	9	5	2.7	246	17	21	<0.1	28	246	440	670	810	—		
57333	26/06/80	7.6	0.40	127	1	4	0.4	251	40	16	<0.1	8.5	251	321	435	691	—		
57334	26/06/80	7.7	0.05	83	12	17	1.5	189	45	23	0.1	3.9	189	257	380	525	—		
57335	26/06/80	7.6	0.04	197	14	23	3.2	359	130	43	<0.1	6.2	359	550	825	1005	—		
57339	26/06/80	7.2	0.06	134	11	13	25	296	78	27	0.2	1.7	296	378	525	783	—		
57444	26/06/80	8.5	0.60	31	6	5	1.9	48	14	31	<0.1	1.7	48	101	155	240	—		



Map 3126-6
WATER QUALITY

Scale 1 : 300 000



LEGEND

- 214 Overburden well with reported salty water; depth to salty water-bearing zone shown in feet
- 282 Bedrock well with reported salty water; depth to salty water-bearing zone shown in feet
- 682 Overburden well with reported sulphurous water; depth to sulphurous water-bearing zone shown in feet
- 538 Bedrock well with reported sulphurous water; depth to sulphurous water-bearing zone shown in feet
- 250 Overburden well with reported mineralized water; depth to mineralized water-bearing zone shown in feet
- 373 Bedrock well with reported mineralized water; depth to mineralized water-bearing zone shown in feet

NOTE:
"Sulphurous" water usually denotes the presence of hydrogen sulphide gas; a high concentration of sulphate (SO₄) may also be present

SOURCES OF INFORMATION

Map compilation by M.E. Turner
Cartography by D. McQuillan
Geologic information was derived from water-well records on file with the Ontario Ministry of the Environment, up to September, 1979
Base map was derived from 1:25 000 and 1:50 000 sheets of the National Topographic series

METRIC CONVERSIONS

- 1 foot = 0.305 metres
- 1 mile = 1.609 kilometres
- 1 gallon = 4.546 litres
- 1 gallon per minute = 7.576 x 10⁻³ litres per second